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IN THE CLAIMS:

Listing of Claims:

1. (original) A direction-finding method comprising the steps of:
  - 2 establishing a cross-over position point;
  - 3 relocating a receiver to a new receiver spacial location;
  - 4 said receiver at said new receiver position receiving a transmission from a transmitter at a transmitter position;
  - 5 determining a real-time line of bearing from said receiver to said transmitter;
  - 7 generating a connecting vector from said real-time line of bearing to said cross-over position point; and
  - 9 identifying a real-time position of said transmitter along said connecting vector.
- 1 2. (original) The method of Claim 1, wherein said identifying comprises identifying a best guess transmitter position responsive to said real-time position of said transmitter.
- 1 3. (original) The method of Claim 2, further comprising the steps of:
  - 2 again relocating said receiver to a new receiver spacial location;
  - 3 said receiver at said new receiver position receiving a transmission from said transmitter at a transmitter position;
  - 5 determining another said real-time line of bearing from said receiver to said transmitter;
  - 7 generating a said connecting vector from said last real-time line of bearing to said best guess transmitter position; and
  - 9 identifying said best guess position of said transmitter along said connecting vector.

1       4. (original) The method of Claim 3, wherein:

2                 said determining step further comprises determining a quality factor for said real-  
3       time line of bearing; and

4                 said identifying step further comprises assigning a probability factor to said real-  
5       time position of said transmitter responsive to said quality factor.

1       5. (original) The method of Claim 3, further comprising a repeating step to repeat said  
2       relocating, receiving, determining, generating and identifying steps until said probability  
3       factor exceeds a predetermined threshold value.

1       6. (original) The method of Claim 3, further comprising a repeating step to repeat said  
2       relocating, receiving, determining, generating and identifying steps until a user terminates  
3       said direction finding method.

1       7. (original) The method of Claim 3, further comprising a repeating step to repeat said  
2       relocating, receiving, determining, generating and identifying steps until said probability  
3       factor meets a user-defined threshold value.

1       8. (previously presented) A direction-finding method executed by a portable DF set  
2       comprising a receiver and a programmable computing system comprising a processor, an  
3       input device, an output device and a storage medium, the method comprising the steps of:

4                 establishing a cross-over position point representing a position of a transmitter  
5       and outputting said point at said output device;

6                 moving said DF set to a new DF set position;

7                 receiving at said DF set in said new DF set position, a transmission from said  
8       transmitter;

9                 determining, via said programmable computer, a real-time line of bearing from  
10      said DF set to said transmitter responsive to said transmission;

11                 generating, via said programmable computer, a connecting vector from said real-  
12      time line of bearing to said cross-over position point; and

13           determining a real-time transmitter position along said connecting vector and  
14    outputting said position at said output device.

1    9. (original) The method of Claim 8, wherein said identifying comprises identifying a  
2    best guess transmitter position responsive to said real-time position of said transmitter.

1    10. (original) The method of Claim 9, further comprising the steps of:

2           again relocating said receiver to a new receiver spacial location;

3           said receiver at said new receiver position receiving a transmission from said  
4    transmitter at a transmitter position;

5           determining another said real-time line of bearing from said receiver to said  
6    transmitter;

7           generating a said connecting vector from said last real-time line of bearing to said  
8    best guess transmitter position; and

9           identifying said best guess position of said transmitter along said connecting  
10   vector.

1    11. (original) The method of Claim 10, wherein:

2           said determining step further comprises determining a quality factor for said real-  
3    time line of bearing; and

4           said identifying step further comprises assigning a probability factor to said real-  
5    time position of said transmitter responsive to said quality factor.

1    12. (original) The method of Claim 10, further comprising a repeating step to repeat said  
2    relocating, receiving, determining, generating and identifying steps until said probability  
3    factor exceeds a predetermined threshold value.

1    13. (original) The method of Claim 10, further comprising a repeating step to repeat said  
2    relocating, receiving, determining, generating and identifying steps until a user terminates  
3    said direction finding method.

1   **14.** (original) The method of Claim 10, further comprising a repeating step to repeat said  
2   relocating, receiving, determining, generating and identifying steps until said probability  
3   factor meets a user-defined threshold value.

1   **15.** (previously presented) A real-time direction-finding system, comprising:

2                 a transmitter transmitting wireless transmissions, said transmitter defining a  
3   spacial location;

4                 a DF set comprising a movable receiver for receiving said transmissions; and

5                 a computing device for determining said location of said transmitter responsive to  
6   transmissions received by said movable receiver and not responsive to other said  
7   receivers, wherein said computing device operatively:

8                 generates a cross-over point, said cross-over point defined as the  
9   intersection of a pair of sequential real-time lines of bearing from said DF set each line of  
10   bearing corresponding to a wireless transmission from said transmitter received by said  
11   DF set;

12                 receives a transmission signal responsive to a transmission received by  
13   said DF set after said DF set has been moved to a new spacial location;

14                 determines a real-time line of bearing from said DF set to said transmitter  
15   responsive to said transmission signal;

16                 generates a connecting vector from said real-time line of bearing; and

17                 determines a real-time transmitter position along said connecting vector  
18   and outputting said position at an output device associated with said computing device.

1   **16.** (canceled)